

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method of reuse of medical script objects used in the automated diagnosis or management of a medical condition, the method comprising:

providing a plurality of disease objects, each disease object associated with a plurality of symptom objects; ~~and~~

assigning a weight for each symptom, wherein a particular disease object includes a preferred weight for one or more preferred symptoms and an alternative weight for one or more related alternative symptoms, wherein the alternative symptoms for a particular preferred symptom are selected from a set of archived symptom objects that are available for reuse;

selecting a disease object applicable to a patient; and

invoking a preferred symptom object or one of the related alternative symptom objects for the selected disease object so as to output a diagnosis of a patient based on the object invocation.

2. (Original) The method defined in Claim 1, additionally comprising assigning a new name for a symptom object that is reused.

3. (Original) The method defined in Claim 1, wherein the set of archived symptom objects is stored in a database.

4. (Original) The method defined in Claim 3, additionally comprising accessing the set of archived symptom objects stored in the database via a global computer network.

5. (Previously presented) The method defined in Claim 1, wherein each symptom object has underlying objects used to establish the symptom, wherein the objects are arranged in a hierarchical relationship.

6. (Currently amended) An object based automated computer-implemented diagnostic system comprising:

a plurality of objects which interact to determine a diagnosis of a patient, wherein the objects includes at least two ~~of~~ diagnostic objects comprising:

a disease object, a symptom object, a valuator object, a question object, a node object and a candidates object, wherein the objects are arranged in a hierarchical relationship such that the result of one of the objects is input to another of the objects; and

at least one of the diagnostic objects directly invokes another of the diagnostic objects in a computer-based medical diagnostic system so as to output a diagnosis of a patient based on the prior object invocation.

7. (Original) The system of Claim 6, wherein the objects include a plurality of disease objects and a plurality of symptom objects.

8. (Original) The system of Claim 6, additionally comprising an engine object to coordinate the other objects.

9. (Currently amended) An object based automated diagnostic system comprising a plurality of diagnostic objects which interact to determine a diagnosis of a patient, wherein the diagnostic objects include at least a plurality of disease objects, a plurality of symptom objects and a plurality of valuator objects, and wherein at least some of the diagnostic objects perform their own tasks and directly call upon other diagnostic objects to perform their tasks at the appropriate time in a computer-based medical diagnostic system so as to output a diagnosis of a patient.

10. (Previously presented) The system of Claim 9, wherein at least one of the plurality of disease objects includes a preferred weight for a preferred symptom and an alternative weight for one or more alternative symptoms of the preferred symptom.

11. (Currently amended) A computer-implemented method of reuse of medical script objects used in the automated diagnosis or management of a medical condition, the method comprising:

providing a plurality of disease objects, each disease object associated with a plurality of symptom objects; and

assigning a weight for each symptom, wherein a particular disease object includes a preferred weight for one or more preferred symptoms and an alternative weight for one or more alternative symptoms, wherein the alternative symptoms for a particular preferred symptom are selected from a set of archived symptom objects that are available for reuse, and wherein a the particular preferred symptom has one or more related alternative symptoms that represent different approaches for eliciting further diagnostic information related to a same patient health condition;

selecting a disease object applicable to a patient; and

invoking a preferred symptom object or one of the related alternative symptom objects for the selected disease object so as to output a diagnosis of a patient based on the object invocation.

12. (Previously presented) The method of Claim 11, wherein the one or more alternative symptom is a plurality of symptoms, wherein the alternative weight is a plurality of alternative weights, and wherein the alternative weights for the plurality of alternative symptoms of the particular preferred symptom are different.

13. (Previously presented) The method of Claim 12, wherein the alternative weights for the one or more alternative symptoms of the particular preferred symptom and the preferred weight of the particular preferred symptom are different.

14. (Previously presented) The method of Claim 11, additionally comprising assigning a new name for a symptom object that is reused.

15. (Previously presented) The method of Claim 11, wherein the set of archived symptom objects is stored in a database.

16. (Previously presented) The method of Claim 15, additionally comprising accessing the set of archived symptom objects stored in the database via a global computer network.

Appl. No. : **09/785,044**
Filed : **February 14, 2001**

17. (Previously presented) The method of Claim 11, wherein each symptom object has underlying objects used to establish a symptom.

18. (Previously presented) The method defined in Claim 1, wherein the reuse includes using one of the archived symptom objects in conjunction with a plurality of disease objects.

19. (Previously presented) The method defined in Claim 1, wherein a particular preferred symptom is selected when a particular diagnosis is likely.

20. (Previously presented) The system of Claim 6, wherein the objects include a disease object, a symptom object, a valuator object, a question object, a node object and a candidates object.

21. (Previously presented) The system of Claim 20, wherein the symptom object invokes the valuator object.

22. (Previously presented) The system of Claim 20, wherein the valuator object invokes the question object.

23. (Previously presented) The system of Claim 20, wherein the question object invokes the node object.

24. (Previously presented) The system of Claim 6, wherein a particular disease is associated with a plurality of disease objects corresponding to different phases of the particular disease.

25. (Previously presented) The system of Claim 6, wherein a particular disease is associated with a plurality of disease objects corresponding to different populations for the particular disease.

26. (Previously presented) The system of Claim 6, wherein a particular disease object is representative of a plurality of related diseases that share common symptoms.

Appl. No. : **09/785,044**
Filed : **February 14, 2001**

27. (Previously presented) The system of Claim 6, wherein the objects act independently of other objects and a particular object retains a record of its actions for future reference.

28. (Previously presented) The system of Claim 6, wherein each object has corresponding data and processes, and wherein the data is encapsulated so that other objects only see the processes of a particular object that can be invoked to access the data.

29. (Previously presented) The system of Claim 6, wherein a particular disease object monitors the questions and answers of other disease objects.

30. (Previously presented) The system of Claim 8, wherein the engine object coordinates a plurality of concurrently operating disease objects by switching execution among the disease objects.

31. (Previously presented) The system of Claim 9, wherein one of the symptom objects invokes one of the valuator objects.

32. (Previously presented) The system of Claim 9, wherein the plurality of objects includes a plurality of question objects and node objects.

33. (Previously presented) The system of Claim 32, wherein one of the valuator objects invokes one of the question objects.

34. (Previously presented) The system of Claim 32, wherein one of the question objects invokes one of the node objects.

35. (Previously presented) The system of Claim 9, wherein a particular disease is associated with a plurality of disease objects corresponding to different phases of the particular disease.

Appl. No. : **09/785,044**
Filed : **February 14, 2001**

36. (Previously presented) The system of Claim 9, wherein a particular disease is associated with a plurality of disease objects corresponding to different populations for the particular disease.

37. (Previously presented) The system of Claim 9, wherein a particular disease object is representative of a plurality of related diseases that share common symptoms.

38. (Previously presented) The system of Claim 9, wherein the objects act independently of other objects and a particular object retains a record of its actions for future reference.

39. (Previously presented) The system of Claim 9, wherein each object has corresponding data and processes, and wherein the data is encapsulated so that other objects only see the processes of a particular object that can be invoked to access the data.

40. (Previously presented) The system of Claim 9, wherein a particular disease object monitors the questions and answers of other disease objects.

41. (Previously presented) The system of Claim 9, additionally comprising an engine object to coordinate the other objects.

42. (Previously presented) The system of Claim 41, wherein the engine object coordinates a plurality of concurrently operating disease objects by switching execution among the disease objects.

43. (Previously presented) The method of Claim 11, wherein the reuse includes using one of the archived symptom objects in conjunction with a plurality of disease objects.

44. (Previously presented) The method of Claim 11, wherein a particular preferred symptom is selected when a particular diagnosis is likely.

Appl. No. : **09/785,044**
Filed : **February 14, 2001**

45. (Previously presented) The method of Claim 1, wherein a particular disease is associated with a plurality of disease objects corresponding to different phases of the particular disease.

46. (Previously presented) The method of Claim 1, wherein a particular disease is associated with a plurality of disease objects corresponding to different populations for the particular disease.

47. (Previously presented) The method of Claim 1, wherein a particular disease object is representative of a plurality of related diseases that share common symptoms.

48. (New) The method of Claim 1, wherein the selected disease object directly invokes another of the plurality of disease objects.

49. (New) The system of Claim 6, wherein the disease object directly invokes another disease object.

50. (New) The system of Claim 6, wherein the disease object directly invokes the symptom object.

51. (New) The system of Claim 9, wherein one of the plurality of disease objects directly calls another of the plurality of disease objects.

52. (New) The method of Claim 11, wherein the selected disease object directly invokes another of the plurality of disease objects.